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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/848,906

Applicant(s)

PALECEK ET AL.

Examiner

CAMQUY TRUONG

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-21 are presented for examination.
2. It is noted that although the present application does contain line numbers in the specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the examiner and Applicant all future correspondence should include the recommended line numbering.

Claim Objections

3. Claim 21 is objected to because of the following informalities:

As to claim 21, line 15, remove the period at the end of line 15 and replace with “;”. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 11-20, are rejected under 35 U.S.C 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. The claim language in the following claim is not clearly understood:

i. As to claim 11, lines 5-8, it is not clearly understood what is coupled to what (it is impossible that step of generating couple to step of step of service request); Lines 5-8, it is not clearly understood how the "service request" is honoring with in database management system via I/O activity and computational activity, and "a data base management system" relates to "first and second thread pool", and as to the limitation of "means responsively coupled to said generating means for honoring said service request via said Input/Output activity and said computational activity, examiner interprets the limitation as client computer coupled to data base management system and will be considered as such for the examination purposes; Lines 9-10, As to the limitation of "first thread pool means responsively coupled to said honoring means for handling said Input/Output activity", examiner interprets the limitation as first thread pool handling the Input/output activity by storing the activity in to the pool and will be considered as such for the examination purposes; Lines 11-12, As to the limitation of "first thread pool means responsively coupled to said honoring means for handling said computational activity", examiner interprets the limitation as first thread pool handling the computational activity by storing the computational activity in to the pool and will be considered as such for the examination purposes.

ii. As to claim 16, lines 6-9, it is not clearly understood how "a first thread pool" and "a second thread pool" couple to "service application" (i.e. a first thread pool and a second thread pool interact with service application). As to the

limitation of "a first thread pool and a second thread pool coupled to service application , examiner interprets the limitation as a first thread pool and a second thread pool interact to service application ... and will be considered as such for the examination purposes.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable Blackmon et al (U.S. Patent 6,895,482 B1) (hereinafter Blackmon) in view of Siksa (U.S. Patent 6,292,824 B1) (hereinafter Siksa), and further in view of Emmerson et al. (U.S. Patent 7,286,836 B2) (hereinafter Emmerson).

8. As to claim 21, Blackmon teaches the invention substantially as claimed including: An apparatus comprising: an apparatus comprising:

a. a plurality of client applications (process/application program, col. 10, line 34) which generate a plurality of service requests (the application program generating the command, col. 7, lines 51-52; col. 10, lines 34-36);

c. a first of said plurality of service requests requiring Input/Output activity (commands may be typed according the I/O; col. 6, lines 56-60) and computational activity (commands may be typed according business computing application, col. 6, lines 56-60) generated by a first one of said plurality of client applications (the application program generating the command, col. 7, lines 51-52; col. 10, lines 34-36) transferred to said service application (command interface 310 receiving commands from particular computer processor connected on the bus network, 27-39; col. 7, lines 9-10);

d. a first thread pool (respective command FIFO, col. 7, line 40) responsively coupled to said service application which handles said Input/Output activity of said first service request (each command of a particular command type is input into its respective command FIFO, col. 7, line 38 – col. 8, line 10) a second thread pool responsively coupled to said service application which handles said computational activity of said first service request.

e. a second thread pool (respective command FIFO, col. 7, line 40) responsively coupled to said service application which handles said computation activity of said first service request (each command of a particular command type is input into its respective command FIFO, col. 7, line 38 – col. 8, line 10)

g. wherein a second one of said plurality of client applications generates a second service request transferred to said service application requiring Input/Output activity and computational activity (the application program generating the different type of command, col. 7, lines 51-52; col. 10, lines 34-36);and

i. a user terminal responsively coupled to a data base management system via a publically accessible digital data communication network (Fig. 1, workstations 182 coupled to storage 192 via network 160; col. 5, lines 11-36).

9. Blackmon does not explicitly teach first client application is located within said user terminal; a service application responsively coupled to said plurality of client applications; a first client key which uniquely identifies said first one of said plurality of client applications to said first thread pool and said second thread pool; a second client key which uniquely identifies said second one of said plurality of client applications to said first thread pool and said second thread pool. However, Siksa teaches first client application is located within said user terminal (client applications on the client system, col. 1, lines 21-23); a service application responsively coupled to said plurality of client applications (the server applications are generally provided at the server, with concurrent uploading of corresponding client applications on the client systems, col.1, lines 20-23) ; a first client key which uniquely identifies said first one of said plurality of client applications to said first thread pool and said second thread pool; a second client key which uniquely identifies said second one of said plurality of client applications to said first thread pool and said second thread pool (a client key is unique identifier for the client application associated with a Agent, col. 7, lines 66-67).

10. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Blackmon to incorporate the teaching of a

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service application responsively coupled to said plurality of client applications; a first client key which uniquely identifies said first one of said plurality of client applications to said first thread pool and said second thread pool; a second client key which uniquely identifies said second one of said plurality of client applications to said first thread pool and said second thread pool as taught by Siksa because this would provide a framework allow for development and enhancement of client-server applications without the need for re-programming the framework.

11. Blackmon and Siksa do not explicitly teach said service application is located within said data base management system. However, Emmerson teaches said service application is located within said data base management system (an application database 11 stores a plurality of service enabling applications, col. 5, lines 2-3).

12. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Blackmon and Siksa to incorporate the teaching of service application is located within said data base management system as taught by Emmerson because this provide a flexibility for client to use the service applications both on-line and off-line.

13. As to claim 1, Blackmon teaches the invention substantially as claimed including: An apparatus comprising:

a. a client computer (computer system 110 would be considered a client/workstations 182, col. 5, lines 24-28) having at least one of a plurality of client

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applications (process/application program, col. 10, line 34) which generate service requests (the application program generating the command, col. 7, lines 51-52; col. 10, lines 34-36);

b. a hardware server (the computer system may be configured to be a server, col. 5, lines 24-25) having a service application responsively coupled to said plurality of client applications (a server provide programs for other clients by interacting with other workstation 182, col. 5, lines 24-28);

c. a first service request requiring Input/Output activity (commands may be typed according the I/O; col. 6, lines 56-60) and computational activity (commands may be typed according business computing application, col. 6, lines 56-60) generated by a first one of said plurality of client applications (the application program generating the command, col. 7, lines 51-52; col. 10, lines 34-36) transferred to said service application (command interface 310 receiving commands from particular computer processor connected on the bus network, 27-39; col. 7, lines 9-10);

d. a first thread pool (respective command FIFO, col. 7, line 40) responsively coupled to said service application which handles said Input/Output activity of said first service request (each command of a particular command type is input into its respective command FIFO, col. 7, line 38 – col. 8, line 10); and

e. a second thread pool (respective command FIFO, col. 7, line 40) responsively coupled to said service application which handles said computational activity of said first service request (each command of a particular command type is input into its respective command FIFO, col. 7, line 38 – col. 8, line 10).

14. As to claim 2, Siksa teaches a first client key which uniquely identifies said first one of said plurality of client applications to said first thread pool and said second thread pool (a client key is unique identifier for the client application associated with a Agent, col. 7, lines 66-67).

15. As to claim 3, Blackmon teaches a second one of said plurality of client applications generates a second service request transferred (the application program generating the command, col. 7, lines 51-52; col. 10, lines 34-36). to said service application requiring Input/Output activity (commands may be typed according the I/O; col. 6, lines 56-60) and computational activity (commands may be typed according business computing application, col. 6, lines 56-60).

16. As to claim 4, Siksa teaches a second client key which uniquely identifies said second one of said plurality of client applications to said first thread pool and said second thread pool (a client key is unique identifier for the client application associated with a Agent, col. 7, lines 66-67).

17. As to claim 5, Blackmon teaches a user terminal responsively coupled to a data base management system via a publically accessible digital data communication network (Fig. 1, workstations 182 coupled to storage 192 via network 160; col. 5, lines 11-36); and

Siksa teaches first client application is located within said user terminal (client applications on the client system, col. 1, lines 21-23)

Emmerson teaches said service application is located within said data base management system (an application database 11 stores a plurality of service enabling applications, col. 5, lines 2-3).

18. As to claim 6, Blackmon teaches a method of managing a service request requiring Input/Output activity and computational activity of a client application by a service application comprising:

a. transferring said service request from said client application to said service application (command interface 310 receiving commands from particular computer processor connected on the bus network, 27-39; col. 7, lines 9-10);

b. handling said Input/Output activity using a first thread pool (each command of a particular command type is input into its respective command FIFO, col. 7, line 38 – col. 8, line 10); and

c. handling said computational activity using a second thread pool (each command of a particular command type is input into its respective command FIFO, col. 7, line 38 – col. 8, line 10).

19. As to claim 7, it is rejected for the same reason as claim 2.

20. As to claim 8, Blackmon teaches transferring said service request to said service

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application via a publically accessible digital data communication network (col. 5, lines 18-36).

21. As to claim 9, Siksa teaches a user terminal wherein said client application is located within said user terminal (client applications on the client system, col. 1, lines 21-23).

22. As to claim 10, Emmerson teaches said service application is located within said data base management system (an application database 11 stores a plurality of service enabling applications, col. 5, and lines 2-3).

23. As to claim 11, the limitation of "means for generating a service request within a client computer requiring Input/Output activity and computation activity" invoke 35 U.S.C 112, sixth paragraph. Okuda teaches an apparatus comprising:

a. means for generating a service request within a client computer (workstation 182 / computer system 100, Fig. 1) requiring Input/Output activity and computational activity (the application program generating the command, col. 7, lines 51-52; col. 10, lines 34-36);

b. means responsively coupled to said generating means for honoring said service request via said Input/Output activity and said computational activity (Fig. 1, workstation 182; computer system 100 couple to storage 192, col. 5, lines 24-28);

c. first thread pool (respective command FIFO, col. 7, line 40) means responsively coupled to said honoring means for handling said Input/Output activity (each command of a particular command type is input into its respective command FIFO, col. 7, line 38 – col. 8, line 10); and

d. second thread pool (respective command FIFO, col. 7, line 40) means responsively coupled to said honoring means for handling said computational activity (each command of a particular command type is input into its respective command FIFO, col. 7, line 38 – col. 8, line 10).

24. As to claims 12-13, it is rejected for the same reason as claim 2.

25. As to claim 14, Emmerson teaches honoring means further comprises a data base management system (an application database 11 stores a plurality of service enabling applications, col. 5, and lines 2-3).

26. As to claim 15, Blackmon teaches said generating means further comprises a user terminal (workstation 182, Fig. 1).

27. As to claim 16, Blackmon teaches in a data processing system having a client application which generates a service request requiring Input/Output activity and computational activity responsively coupled to a service application, the improvement comprising:

a. a first thread pool responsively coupled to said service application for handling said Input/Output activity (after the commands have been separated by type, the command are routed to its associate FIFO, col. 7, line 66 – col. 7); and

b. a second thread pool responsively coupled to said service application for handling said computational activity.

28. As to claim 17, it is rejected for the same reason as claim 2.

29. As to claim 18, Blackmon teaches a user terminal containing said client application (the process, application, and col. 6, lines 58-62).

30. As to claim 19, it is rejected for the same reason as claim 8.

31. As to claim 20, Emmerson teaches said service application is located within said data base management system (an application database 11 stores a plurality of service enabling applications, col. 5, and lines 2-3).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAMQUY TRUONG whose telephone number is (571)272-3773. The examiner can normally be reached on 9:00am - 5:30pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai An can be reached on (703)305-9678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

Camquy Truong

July 28, 2008